UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,198	06/06/2001	Tom McGee	US 010136	9113

24737   7590   07/26/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER
LAYE, JADE O

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)	
Office Action Summary	09/876,198	MCGEE ET AL.	
	Examiner	Art Unit	
	Jade O. Laye	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 June 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☒ Claim(s) <u>2-10 and 12-21</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>6/6/01</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20050211

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 6/605 have been fully considered but they are unpersuasive.

Accordingly, **THIS ACTION IS MADE FINAL.**

Applicant argues that "there is no teaching or disclosure in Jackson of obtaining a first

value representing <u>characteristics data</u> of said at least one program at said start time; and storing

said first value in said catalog; and obtaining a second value representing <u>characteristic data</u> of

said at least one program at said end time; and storing said second value program in said

catalog…"   (Applicant's Response, Pg. 13).   In attempts to distinguish Applicant's

"characteristic data" from Jacksons "EPG data," Applicant goes on to state, "…characteristic

data and not EPG data *[as in Jackson]* is stored in *[Applicant's]* EPG catalog…" (Applicant's

Response, Pg. 12).

The Examiner finds this argument unpersuasive for one central reason: Applicant's

specification provides no support for such a distinction. The Applicant provides no definition,

example, etc. of what he or she considers to be "characteristic data." Therefore the Examiner,

reasonably interpreting "EPG data" as broadly as possible, considers the term to read upon

"characteristic data." EPG data can include program start/stop times, genre and rating

descriptions, etc., all of which are "characteristic" of the program. Accordingly, the Examiner

considers Jackson to read upon each and every limitation of claim 1.

The remainder of Applicant's arguments are all based upon the same argument regarding the distinction between "characteristic" and "EPG" data. Accordingly, they are also considered unpersuasive for the same reasons.

Lastly, Applicant advances a few arguments regarding the technical distinctions between the applied references and the present application. Although Applicant _may_ be correct, the claims (broadly written) do not reflect such technical distinction.

Accordingly, the Examiner maintains the non-final rejection mailed 4/20/05 is proper.

2. Due to Applicant's amended specification, the objection applied in the previous Non-Final Action has been hereby withdrawn.

Claim Objections

3. Claims 2-10 and 12-21 are objected to because of the following informalities:

a. The phrase "...said program..." in claims 2-10 and 12-20 lacks antecedent basis. The phrase should refer back to "said at least one program."

b. The phrase "...said value representing characteristics data..." in claims 5-10 and 15-20 lacks antecedent basis. It is not clear whether the phrase refers back to the first or second value representing characteristic data recited in claim 1.

c. The phrase "...the audio portion..." in claim 8 lacks antecedent basis.

d. The phrase "...said second value program..." in claim 21 lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

4.   Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson. (US Pat.

No. 5,963,264).

As to claim 1, Jackson discloses an electronic programming guide system (EPG) capable

of controlling a recording device. More specifically, the system is capable of obtaining data

relating to the start and stop times of the EPG selections, storing said start and stop times in an

nonvolatile memory, and then comparing said start and stop times (i.e., values) with the

incoming signal in order to determine whether said incoming signal is the requested program.

Thereby, the EPG system is capable of recording a program based upon its actual air time, not

simply the time listed on the EPG. (Abstract, Col. 1, Ln. 5-8 ; Col. 2, Ln. 21-26 & 57-67 ; Col.

4, Ln. 26-35 ; Col. 5, Ln. 50-67 thru col. 6, Ln. 1-20). Accordingly, Jackson anticipates each and

every limitation of claim 1.

As to claim 2, Jackson further teaches the program is carried by a video signal.

(Abstract). Accordingly, Jackson anticipates each and every limitation of claim 2.

As to claim 3, Jackson further teaches the system includes a display device. (Fig. 1, Item

#36). Accordingly, Jackson anticipates each and every limitation of claim 3.

As to claim 4, Jackson further teaches the system includes a recording device. (Abstract).

Accordingly, Jackson anticipates each and every limitation of claim 4.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

5.   Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson in

view of Dimitrova et al. (US Pat. No. 6,100,941).

At the outset, the Examiner would like to note the Dimitrova reference is not precluded

under 35 U.S.C. 103(c). This statutory provision provides that: "Subject matter developed by

another person, which qualifies as prior art *only* under one or more subsections (e), (f), or (g) of

section 102 of this title, shall not preclude patentability...". 35 U.S.C. 103(c). Applying the

plain language of 103(c), Dimitrova is acceptable as a reference because (1) it was developed by

another inventive entity (i.e., another person) and (2) it qualifies as prior art under 102(a).

Claim 5 recites the method of claim 1, wherein said value representing characteristics

data gathered from said program is a signature generated by using a combination of features

from a frame of said program. As discussed above, Jackson discloses all limitations of claim 1,

but fails to specifically recite the limitations of claim 5. However, within the same field of

endeavor, Dimitrova et al disclose a similar system and method capable of locating the start/stop

times of a commercial disposed within a broadcast stream. More specifically, this can be

accomplished through an analysis of a signature generated by using a combination of features

from a frame of the broadcast signal. (Col. 1, Ln. 7-20 ; Col. 2, Ln. 10-64 ; Col. 14, Ln. 35-38 ;

Col. 17, Ln. 50-67 thru Col. 18, Ln. 1-45). Accordingly, it would have been obvious to one of

ordinary skill in this art at the time of applicant's invention to combine the systems of Jackson

and Dimitrova in order to provide a system capable of detecting the start/stop times of a broadcast program via an analysis of various features of the program frames, thereby providing a more accurate program detection system.

Claim 6 recites the method of claim 1, wherein said value representing characteristic data gathered from said program is a color histogram generated from a frame of said program. As discussed above, Jackson teaches all limitations of claim 1, but fails to specifically disclose the limitations of claim 6. However, within the same field of endeavor, Dimitrova further teaches the analysis of a color histogram generated from a program frame, which is used to determine the start/stop time of a program (i.e., commercial) located within the stream. (Col. 18, Ln. 15-18). Accordingly, the combined systems of Jackson and Dimitrova contain all limitations of claim 6.

Claim 7 recites the method of claim 1, wherein said value representing characteristics data gathered from said program is generated from closed captioning data gathered from a frame of said program. As discussed above, Jackson contains all limitations of claim 7, but fails to specifically recite the limitations of claim 7. However, within the same field of endeavor, Dimitrova further teaches the system can determine start/stop times based upon an analysis of closed captioning data gathered from a program frame. (Col. 2, Ln. 10-64 ; Col. 18, Ln. 19-35). Accordingly, the combined systems of Jackson and Dimitrova contain all limitations of claim 7.

Claim 8 recites the method of claim 1, wherein said value representing characteristics data gathered from said program is generated from the audio portion from one or more frames of said program. As discussed above, Jackson discloses all limitations of claim 1, but fails to specifically recite the limitation of claim 8. However, within the same field of endeavor, Dimitrova further teaches the system can process the audio portion of the signal in order to

determine the start/stop time of the broadcast (i.e., commercial). (Col. 2, Ln. 10-64 & Col. 18, Ln. 19-35). Accordingly, the combined systems of Jackson and Dimitrova contain all limitations of claim 8.

Claim 9 recites the method of claim 1, wherein said value representing characteristics data gathered from said program is a signature generated for a block of discrete cosine values for a frame. As discussed above, Jackson discloses all limitations of claim 1, but fails to specifically recite the limitations of claim 9. However, within the same field of endeavor, Dimitrova further teaches the analysis of a signature derived from the application of a compression technique known as a Discrete Cosine Transfer ("DCT"). (Col. 4, Ln. 63-67 thru Col. 5, Ln. 1-18 & 66-67 thur Col. 6, Ln. 1-39 ; Col. 7, Ln. 58-67 thru Col. 8, Ln. 1-56) (Moreover, Applicant's Fig. 2 is nearly identical to Dimitrova's Fig. 7 --- Note: the DC and AC block signatures are extracted using the DCT). Accordingly, the combined systems of Jackson and Dimitrova contain all limitations of claim 9.

Claim 10 recites the method of claim 1, wherein said value representing characteristics data gathered from said program is obtain from low level features. As discussed above, Jackson contains all limitations of claim 1, but fails to specifically recite the limitations of claim 10. However, within the same field of endeavor, Dimitrova further teaches his system gathers characteristic data from a number of low level features such as frames, signals, color histograms, etc. (as cited in previous claim rejections). Accordingly, the combined systems of Jackson and Dimitrova contain all limitations of claim 10.

6.   Claims 11-14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jackson in view of Takatori. (US Pat. No. #6,252,629).

Claim 11 recites limitations too numerous to list herein (please refer to claim sheet). All

limitations of claim 11 are encompassed within the limitations of claim 1, except the limitation

directed to "...obtaining a first value representing characteristic data of an ending of a program

immediately proceeding said at least one program...". In so far as the limitations of claim 11

mirror those of claim 1, the same rejections under Jackson apply. But, Jackson fails to recite the

additional limitation in claim 11. However, within the same field of endeavor, Takatori discloses

a similar system in which the system analyzes the program preceding the requested program in

order to determine when to begin recording. (Col. 1, Ln. 63-67 thur Col. 2, Ln. 1-5, 33-40, &

60-65). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of

applicant's invention to combine the systems of Jackson and Takatori in order to provide a

system which could update a recording function in accordance with an extension of the

preceding program.

The limitations of claim 21 are encompassed by the limitations of claim 11. Thus, it is

analyzed and rejected as previously discussed.

The rejections of claims 12-14 mirror the rejections of claims 2-4, respectively.

Therefore, each is analyzed and rejected as previously discussed.

7.   Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson in

view of Takatori as applied to claim 11 above, and further in view of Dimitrova.

The rejections of claims 15-20 mirror the rejections of claims 5-10, respectively. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to further modify the combined systems of Jackson, Takatori, and Dimitrova in order to provide a system capable of detecting the start/stop times of a broadcast program via an analysis of various features of the program frames, thereby providing a more accurate program detection system. In addition, the further modification would provide a system which could update a recording function in accordance with an extension of the preceding program.

8.   Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson in view of Kim. (US Pat. No. 5,526,130).

Claim 22 recites limitations to numerous to recite herein (please refer to claim sheet). The limitations of claim 22 are encompassed by the limitations of claim 1. However, applicant has added additional limitations directed to "...monitoring said video signal source at time proximal to said program start time..." and setting a logic output means to true or false in order to signal the system to stop or continue the comparison, respectively. Regarding the limitations encompassed under claim 1, the same rejections apply. But, Jackson fails to specifically disclose the additional limitations of claim 22. However, within the same field of endeavor, Kim discloses a similar system in which a broadcast stream is monitored at a time proximal to the program start time. (Col. 7, Ln. 3-11). Moreover, until a corresponding program is found, the system will continue to monitor and compare the stream. (Col. 9, Ln. 5-31). The system accomplishes this by outputting a "yes" (i.e., true) or "no" (i.e., false). (Fig. 8). Accordingly, it

would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of Jackson and Kim in order to provide a more efficient program recording system.

Claim 23 recites the method of claim 22, and further limitations too numerous to recite herein (please refer to claim sheet). As discussed above, the combined systems of Jackson and Kim contain all limitations of claim 22, but they fail to specifically recite the additional limitation of claim 23 directed to monitoring the signal at a time approximate to the program end time. However, claim 23 is an obvious variant of claim 22, which recites monitoring the signal at a time proximal to the start time. Accordingly, the combined systems of Jackson and Kim contain all limitations of claim 23.

Claim 24 recites the system of claim 22, wherein said processor is further operatively connected to a device for further processing said program, wherein a TRUE value for said logic output means causes said processor to turn on said device to the channel of said program. As discussed above, the combined systems of Jackson and Kim contain all limitations of claim 22, and Kim further teaches it is well known in the art for systems such as this to activate a VCR device when a corresponding program is detected (i.e., TRUE logic output). (Col. 1, Ln. 22-41). Furthermore, it is inherent that the VCR be tuned to the necessary channel in order to perform the recording. Therefore, the combined systems of Jackson and Kim contain all limitations of claim 24.

Claim 25 recites the system of claim 24, further comprising that a FALSE value said logic output means causes said processor to turn off said device for further processing. As discussed above, the combined systems of Jackson and Kim contain all limitations of claim 24,

and Kim further teaches it is well known in the art for systems such as this to deactivate the recording apparatus. (Col. 1, Ln. 22-41). Therefore, the combined systems of Jackson and Kim contain all limitations of claim 25.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Jade O. Laye
July 11, 2005.

NGOC-YEN VU
PRIMARY EXAMINER